

AMENDMENTS TO THE CLAIMS

In the Claims, please cancel claims 14 and 22 and amend claims 13 and 16 as follows:

1-12. (canceled)

13. (currently amended) A process for analyzing gene function comprising:

- a) injecting a naked polynucleotide encoding the gene into a blood vessel lumen, *in vivo* ;
- b) increasing permeability in the blood vessel ~~the propensity for macromolecules to move through vessel walls and enter the extravascular space;~~ [[and,]]
- c) delivering the naked polynucleotide to an extravascular cell outside of the blood vessel via the increased permeability, wherein the gene is expressed; and,
- d) analyzing the effects of expression of the gene on the cell.

14. (canceled)

15. (previously presented) The process of claim 13 wherein the gene encodes a protein.

16. (currently amended) A process for analyzing gene function comprising:

- a) injecting a naked oligonucleotide ~~that is not expressed~~ into a blood vessel lumen, *in vivo*;
- b) increasing permeability in the blood vessel ~~the propensity for macromolecules to move through vessel walls and enter the extravascular space;~~ [[and,]]
- c) delivering the naked oligonucleotide to an extravascular cell outside of the blood vessel via the increased permeability; wherein delivery of the oligonucleotide to the cell results in decreased expression of the gene; and,
- d) analyzing the effects of decreased expression of the gene on the cell.

17. (previously presented) The process of claim 16 wherein the oligonucleotide consists of a single strand oligonucleotide.

18. (previously presented) The process of claim 17 wherein the single strand oligonucleotide consists of anti-sense oligonucleotide.

19. (previously presented) The process of claim 18 wherein the anti-sense oligonucleotide consists of an artificial oligonucleotide.

20. (previously presented) The process of claim 16 wherein the oligonucleotide consists of double strand nucleic acid.
21. (previously presented) The process of claim 20 wherein the double strand oligonucleotide comprises RNA.
22. (canceled)
23. (previously presented) The process of claim 21 wherein the double strand oligonucleotide consists of a nucleic acid sequence comprising 10 to 50 bases.
24. (previously presented) The process of claim 23 wherein the double strand oligonucleotide consists of a nucleic acid sequence comprising 18 to 25 bases.
25. (previously presented) The process of claim 16 wherein the oligonucleotide comprises sequence that is similar to a portion of the gene sequence.
26. (previously presented) The process of claim 22 wherein the gene is an endogenous gene.
27. (previously presented) The process of claim 22 wherein the gene is a viral gene.
28. (previously presented) The process of claim 13 wherein analyzing gene function comprises drug design.
29. (previously presented) The process of claim 16 wherein analyzing gene function comprises drug design.